REMARKS

Claims 1-13 are pending. Claims 6-11 have been withdrawn. By this Response, claims 1, 12 and 13 are amended. Reconsideration and allowance based on the above-amendments and following remarks are respectfully requested.

Applicants appreciate the indication of claims 2-5 as containing allowable subject matter.

Abstract

The Office Action objects to the Abstract as not being narrative in format. Specifically, the Office Action alleges that the term "including" should be replaced by "includes" to comply with the proper abstract format. Applicants have provided a new abstract incorporating the above change. Accordingly, withdrawal of the objection is respectfully requested.

§112, Second Paragraph

The Office Action rejects claims 1, 12 and 13 under 35 U.S.C. §112, second paragraph as being indefinite. Specifically, the Office Action alleges that the limitation "each word line in the segment being adjoined to a separate bit line" is unclear. Applicants note that within each segment there are a number of word lines and corresponding bit lines. If, for example, there are three word lines, then each word line will be connected to a separate bit line in

the segment, thus there are three separate bit lines adjoined distinctly to one of the three word lines. Applicants have amended the claims, which should further clarify this feature. Accordingly, withdrawal of the rejection is respectfully requested.

Prior Art Rejections

The Office Action rejects claims 1 and 13 under 35 U.S.C. §103(a) as being unpatentable over Kuroda (US 5,487,029) in view of Clemons (US 4,599,709) and claim 12 under 35 U.S.C. §103(a) as being unpatentable over Kuroda, Clemons and Seyyedy (US 5,969,380). These rejections are respectfully traversed.

For reasons of brevity, applicants arguments in the Response dated September 7, 2004 are hereby incorporated by reference.

Independent claims 1, 12 and 13 have been amended to clarify the features recited therein. Claims 1 and 12 each recite, *inter alia*, the word lines are divided into a number of segments, each segment including and being defined by a plurality of adjoining bit lines in the matrix, each word line in a segment is differentiated based on the position of the word line within the segment, each word line in the segment being adjoined to a separate bit line, where each separate bit line assigned to a segment is connected with an associated sensing means, such, that the word line of the same position within each segment is sensed at the associated sensing means, thus enabling

simultaneous connection of all memory cells assigned to a word line on a segment for readout via the corresponding bit lines of the segment.

Claim 13 recites, *inter alia,* a number of sensing devices connected to each of a corresponding bit lines within each segment of word lines, where each word line in each segment is differentiated based on the position of the word line within the segment, each word line of each segment being adjoined to a separate bit line, such that the word line of the same position within each segment is sensed at an associated sensing device from the number of sensing devices, thus enabling simultaneous connection of all memory cells assigned to a segment.

As recited in the independent claims, each word line and each segment is connected to a specific separate bit line. Each word line within the segment is differentiated and extends across multiple segments. The bit line in each segment that is connected to this word line is connected to the same sensing means. Thus, a simultaneous sensing of all memory cells assigned to the word line is achieved.

The Office Action alleges that Clemons provides the above recited features of claims 1, 12 and 13. The Office Action refers to Figs. 2 and 3 of Clemons, asserting that "all bits lines are connected to the data lines I/01 – I/04... the date lines I/01 – I/04 are simultaneously connected to corresponding sense amplifiers SA1-SA4 via I/O switches" and therefore corresponds to applicants claimed features. Applicants respectfully disagree.

Applicants respectfully submit that FIG. 2 discloses an arrangement of transistors T_{200} – T_{203} provided in block of bit lines and transistors T_{204} – T_{207} provided in a separate block of bit lines. All of the transistors are connected together allowing a decoder to access the transistors simultaneously for a given byte block. See column 4, lines 45-60. Simultaneous access is achieved for the byte block and not for word line across multiple segments.

FIG. 3 discloses a technique for dividing the memory into portions. As seen in FIG. 3, the memory is divided into two portions, byte block 1 through 4 and byte block 5-8. The selected portions are addressed independently and fed to a sense amplifier via an I/O switch. See column 5, lines 30 through column 6, lines 1-15. The addressing of the memory byte blocks as described with regards to FIG. 3 does not teach that each separate bit line assigned to a segment is connected with an associated sensing means such as the word line of the same position within each segment is sensed at the associated sensing means thus enabling simultaneous connection of all memory cells assigned to a word line by segment as recited in claims 1 and 12 and where each word line in each segment is differentiated based on the positioned of the word line within the segment, each word line of each segment being adjoined to a separate bit line, such that the word line of same position within each segment is sensed at an associated sensing device from the number of sensing devices, thus enabling simultaneous connection of all memory cells assigned to a segment, as recited in claim 13. In fact, Clemons teaches with regard to FIG.

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3, separating portions of the memory cells and accessing these separate portions at different times, not a simultaneous axis of all memory cells assigned to a word line, as in the present invention.

Further, Kuroda and Seyyedy fail to make up for the deficiencies of Clemons. Accordingly, reconsideration and withdrawal of the rejections are respectfully requested. Applicants respectfully submit that claims 1, 12 and 13 are in condition for allowance. Claims 1 and 12 are generic claims to the alleged species defined by claims 2-5 and claims 6-9. Applicants respectfully request consideration of the un-elected species represented by claims 6-9. Accordingly, applicants respectfully request the allowance of claims 1-9, 12 and 13 in the application.

Conclusion

For at least these reasons, it is respectfully submitted that claims 1-9 and 12 are distinguishable over the cited art. Favorable consideration and prompt allowance are earnestly solicited.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Chad J. Billings (Reg. No. 48,917) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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3672-0144P

Attachment(s)

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